ABSTRACT OF THE DISCLOSURE

Embodiments of the present invention relate to an adaptive transport protocol (ATP). A uniform datagram protocol (UDP) is used by one or more embodiments of the present invention to transmit the ATP data across a medium. When packets are lost and subsequent packets are received, the subsequent packets do not need to be re-sent if the lost packets later arrive, as in TCP/IP. One embodiment of the present invention builds an expected acknowledge time into the ATP data on top of the existing UDP protocol. The expected acknowledge time may be applied to every packet transmitted through the medium. When the expected acknowledge time in the medium changes, for instance if another transmission enters the shared environment or the characteristics of the transmission medium otherwise change, the expected acknowledge time is modified. If some of the packets in the window are not received by their expected acknowledge times, those packets are re-sent and the complete window of packets is re-ordered.